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ABSTRACT

The theoretical frameworks that have guided a researcher's focus on interest, the curricular and pedagogical implications of this research, and the possibilities for future research are described. The research project in question focuses on the effects of interest and importance on attention and learning of test material through a cognitive constructivist approach. Research has suggested that in texts on high interest topics, cognitive interest may play a stronger role than seductive details in creating interest and increasing the learning of important information. One possible way of using these findings in the classroom is to build curriculum around students' questions on topics that are of interest to them. Future research should value interest as an end in itself and not simply as a means to increased learning. Future studies should also examine the relationships among interest and such constructs as motivation and engagement. (Contains 27 references.) (SLD)

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Research on Interest: Implications for Curriculum Development and Future Research

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Research on Interest:
Implications for Curriculum Development and Future Research

This seems to be an excellent time to assess and integrate the research findings and theoretical underpinnings of interest, motivation, and engagement because each of these constructs is closely related to one another. Yet, each has its own research traditions: definitions of terms, outcome measures, theoretical assumptions, implications for curriculum and pedagogy, and future research agendas. Toward the symposium's goal of searching for commonalities in the literatures, I will describe the theoretical frameworks that have guided my research on interest, the curricular and pedagogical implications I see for this work, and possibilities for a research agenda in the future.

Theoretical Framework

Even within the literature on interest, various definitions and theories of interest have been formulated (e.g., Anderson, Shirey, Wilson, & Fielding, 1984; Berlyne, 1960; Bernstein, 1955; Dewey, 1913; Kintsch, 1980; Krapp, Hidi, & Renninger, 1992; Schank, 1979). All assume that interest arises as individuals interact with their environment. These theories have tended to focus either on dispositions that are specific to individuals (known as individual or personal interest) or on characteristics of the environment that create interest for many individuals (known as situational interest) (Krapp et al., 1992). Personal interest, which Edward Deci (1992) has equated with intrinsic motivation, is topic- or activity-specific, develops over time, is relatively stable, and is associated with personal significance, positive emotions, high value, and increased knowledge. In contrast, situational interest is evoked by things in the environment that create a momentary interest. In the case of reading, these may be characteristics of the text (which has been the focus of my own work), inducements (or extrinsic motivation), and social activities surrounding the reading event.

In studying characteristics of text related to situational interest, I have also drawn on the work of Walter Kintsch (1980) and Uli Schiefele (1991, 1992), both of whom draw a distinction between emotional and cognitive interest. Kintsch, for example, described emotional interest as aroused when events have a direct emotional impact and when stories invite a vicarious experience in the reader. Thus, as Schank (1979) has emphasized, emotional interest involves topics that are personally involving and inherently interesting such as death, danger, injury, power, wealth, sex, and romance. These are often the topics of what Ruth Garner has called *seductive details*. Cognitive interest, on the other hand, has been related in the literature to importance (or, valuing), surprise, prior knowledge, comprehension, and writing style. It is cognitive interest, I think, that has the most implications for pedagogy and curriculum development. And, it is here where we see more overlap between situational and personal interest, especially when we examine constructs such as importance and value as in the work of Ann Renninger (1992) and Patricia Alexander (Alexander & Jetton, 1996).

These are the organizing categories that many of us in this symposium have relied on to differentiate and understand the phenomena we have studied. From a broader theoretical perspective, my own work in this area is best described as cognitive constructivism, which focuses on the cognitive processes of readers, who are viewed as playing an active, strategic role in understanding and learning with text (Spivey, 1997). Specifically, I have focused on studying the effects of interest and importance on attention and learning of text material.

Implications for Curriculum Development and Pedagogy

A general finding in the literature is that readers remember best information that is interesting and important. However, writers' attempts to create interesting text by adding highly interesting but unimportant details or illustrations do not seem to facilitate and may in some cases interfere with the learning of important information (Garner et al. 1991; Garner, Gillingham, & White,1989; Harp & Mayer, 1997; Hidi & Baird, 1988; Wade & Adams, 1990; Wade, Schraw, Buxton, & Hayes, 1993). Rather than relying on these seductive details to create interest in text, my colleagues and I are exploring how writers of informational text can make important

information interesting. But first we had to ask the question of "what is an interesting text?" Using think aloud protocols of college students reading one of two texts on the same topic but written for different purposes (one to inform and the other to inform and entertain), we examined what text characteristics readers tell us creates interest for them and how those characteristics are related to one another (Wade, Buxton, & Kelly, 1999). The topic we chose was dinosaurs, which we assumed would be a high-interest topic for many of our participants. For both texts, we found that the text characteristic most closely associated with interest was information that readers found to be important, new, and valued, which also tended to be unexpected but plausible. Thus, one of our conclusions for curriculum development and pedagogy is that the interestingness of the topic played a key role in readers' evaluations of the two texts and helps to explain why interest and importance were highly related in this study. Although we had not set out to examine readers' strategies, we observed in the think alouds readers' desire to remember the information they valued, which John Guthrie has also been examining in his work on motivation. For example, we observed readers often asking questions about the information they valued.

Other characteristics associated with interest involved writing style and comprehensibility. Readers said they found the text interesting when they could make connections between information in the text and their prior knowledge or experience, when the author made connections through comparisons and analogies, and when the author provided adequate explanatory information and descriptive detail. On the other hand, characteristics that made the texts uninteresting involved problems related to comprehension such as lack of adequate explanation and background information, difficult vocabulary, and lack of coherence. Readers also wished that the texts had included more diagrams and time lines illustrating important text information. These results support the research findings of Isabel Beck and her colleagues (Beck et al., 1991; Beck et al., 1995) and Harp and Mayer (1997), who have emphasized the importance of explanatory information in history and science texts. We concluded that in texts on high interest topics, cognitive interest may play a much greater role than seductive details in creating interest and thereby increase the learning of important information.

How can we use these findings in classrooms? One possibility is to build curriculum around students' questions on topics that are of interest to them, using multiple texts and research projects conducted in group settings. While these ideas will be addressed by some of our other panelists, I would like to focus here on issues related to selecting topics for learning, drawing on the chapter by Doug Hartman and Jeanette Allison in Lively Discussions! (1996). They recommend that topics be linked to larger concepts, that they be complex and multifaceted, and that they be relevant, accessible, and applicable to the lives of students. It was interesting to me that they chose the topic of dinosaurs to show how a concept can meet these criteria if it is linked to larger concepts such as *extinction, evolution,* and *adaptation*. By doing so, the topic could be linked to other concepts and involve opportunities for finding solutions to complex, current problems.

Future Research

Research on interest has a long history, although it has only gained momentum over the last ten years. There are many exciting avenues yet to explore to better understand the concept of interest and to understand how interest can be fostered in classrooms.

As I mentioned earlier, the literature has identified different theoretical constructs of interest (e.g., personal/ individual and situational interest; cognitive and emotional interest). These different conceptions of interest are highly interrelated, as when one reads a well-written, engaging text on a topic of personal interest to discuss with friends. More research is needed to determine how these constructs relate to one another. Where does one end and the other begin? Can situational interest generate personal interest, as some have argued?

Another research question that has implications for curriculum development is: What creates interest and why? How is the interestingness of text, for example, affected by the different constructs of importance such as those identified by Patricia Alexander and Tamara Jetton (1996)? Also, how is interest affected by readers' prior knowledge, which curriculum developers need to consider in understanding their audience? Whereas Kintsch (1980) has theorized that interest is created by optimal amounts of prior knowledge, the research has been mixed.

For example, after an extensive review of the research, Tobias (1994) concluded that a substantial relationship exists between interest and prior knowledge, but Schraw, Bruning, and Svoboda (1995) found only a marginal relationship between prior knowledge and interest. Just as there are different constructs of interest and importance, so are there differences among studies in how prior knowledge is conceptualized and measured. As we engage in such research, we need to consider alternative ways to conceptualize and measure interest, prior knowledge, importance, and outcomes that go beyond learning to include affect, value, engagement, attention, and effort. Other lines of research might investigate questions such as: How does interest change over the course of reading a text? Over time? For different kinds of text, in different subject areas, and for different tasks and classroom contexts?

The questions I've just posed all focus on the reading of printed text--usually the kinds of texts used in school for the purposes of learning information. Reading print has, in fact, been the focus on much of the research on situational interest. Research in this area has also tended to focus on individual readers in situations where they read alone, or as if they were alone. We need to broaden our research focus to look at other ways interest can be created in classrooms, such as how teachers create interest through their pedagogy and curriculum. For example, how is interest created through discussion and other forms of social interaction? Going beyond the classroom, we might also examine interest in after-school Internet-based projects as Ruth Garner is studying, in which students play an important role in choosing activities and topics. We should also look at how research on interest is being used by publishers. A recent example is McGraw-Hill's math textbook that includes commercial advertisements and logos in what the publisher calls "meaningful, real-life" word problems. According to NPR, McGraw-Hill claims that this material was added to create interest and not to generate revenue from the corporations.

In sum, in both research and pedagogy, we should value interest as an end in itself and not simply as a means to increased learning. When interest is viewed as an end, the aesthetic experiences of reading--those positive emotions associated with being interested and sometimes absorbed in experience (cf. Csikszentmihalyi, 1990)--are foregrounded.

All of these questions bring us to the bigger and more complex question of how do these constructs of interest relate to other constructs such as motivation and engagement, which is the focus of this symposium.

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